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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,352

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Thomas Holzbaur

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EXAMINER

COLEMAN, KEITH A

ART UNIT

PAPER NUMBER

3747

MAIL DATE

DELIVERY MODE

12/18/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/583,352	<b>Applicant(s)</b> HOLZBAUR ET AL.	
	<b>Examiner</b> KEITH COLEMAN	<b>Art Unit</b> 3747	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/29/2008</u> .   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 3, 11, 12, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Elmer (US Patent No. 4,176,630).

With regards to claims 1 and 10 and to further prosecution, the patent to Elmer discloses a circuit arrangement having a low temperature coolant circuit (Abstract) for cooling charge air in a motor vehicle having a supercharger with a charge air cooler and coolant radiator (17,13, Col. 2, Lines 33-37), characterized in that wherein a temperature sensor (29, Col. 2, Lines 7-10) is provided at the coolant outlet of the coolant radiator (via passage 19 with sensor 26).

With regards to claim 3, the patent to Elmer discloses wherein the temperature sensor is a thermostat (Col. 2, Lines 6-10).

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With regards to claim 11, the patent to Elmer discloses wherein the coolant flow rate through the radiator is controlled taking into consideration a rotational speed (Col. 2, Lines 45-63).

With regards to claim 12, the patent to Elmer discloses wherein the temperature sensor is integrated with the coolant outlet of the radiator (See Figures 1-3).

With regards to claim 15, the patent to Elmer discloses wherein the step of determining the temperature of the coolant at the outlet of the radiator is performed by using a sensor integrated with the coolant outlet of the radiator (See Figures 1-3).

With regards to claim 16, the patent to Elmer discloses further comprising the step of circulating coolant for an engine of the motor vehicle through a second circuit (See Figures 1-3).

With regards to claim 17, the patent to Elmer discloses wherein the step of circulating coolant through the low temperature circuit comprises circulating the coolant through a low temperature coolant radiator configured to cool the coolant supplied to the single-unit, integrated charge-air and coolant radiator (See Figures 1-3).

Claims 1, 2, 6, 7-10, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Banzhaf et al. (US Patent No. 5,215,044).

With regards to claims 1 and 10, the patent to Banzhaf et al. discloses a low temperature coolant circuit (41, See Figure 6) configured to cool for cooling charge air in a motor vehicle having a supercharger (9) with a single-unit, integrated charge-air and coolant (45), a temperature sensor (97) is provided at a short distance downstream (See Figure 6), wherein the temperature sensor is configured to measure a coolant outlet temperature (via 97).

With regards to claim 2, the patent to Banzhaf et al. discloses wherein the coolant flow rate (via 93) is controlled as a function of the determined coolant temperature (controlled by controller 10).

With regards to claim 6, the patent to Banzhaf et al. discloses wherein the low temperature coolant circuit is connected to a main coolant circuit, so that there is an exchange of coolant (See Figure 6).

With regards to claims 7 and 8, the patent to Banzhaf et al. discloses wherein a control valve (93) is arranged in the low temperature coolant circuit (See Figure 6).

With regards to claim 9, the patent to Banzhaf et al. discloses wherein the coolant traveling from the charge-air/coolant radiator is fed upstream of a pump (52) to a main coolant circuit (See Figure 6).

With regards to claim 13, the patent to Banzhaf et al. discloses a coolant circuit configured to cool coolant for an engine of the motor vehicle (See Figure 6).

With regards to claim 14, the patent to Banzhaf et al. discloses a low temperature coolant radiator configured to cool coolant supplied to the single-unit, integrated charge-air and coolant radiator (See Figure 6).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elmer (US Patent No. 4,176,630) in view of Matthew et al. (US Patent No. 6,679,431)

With regards to claim 4, the patent to Elmer discloses all the limitations of the claimed subject matter except positively disclosing wherein the temperature sensor is integrated into a plastic part which serves to carry coolant.

The patent to Matthew et al. discloses wherein the temperature sensor (14, Col. 1, Lines 65-68) is integrated into a plastic part which serves to carry coolant (Col. 1, Lines 5-10).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the thermostat of Elmer with wherein the plastic part is produced by means of plastic injection-molding in view of the teaching to Matthew et al.,

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in order to have a thermostat and housing that is reliable and easy to manufacture (Col. 1, Lines 20-25)

With regards to claim 5, the patent to Elmer discloses all the limitations of the claimed subject matter except positively disclosing wherein the plastic part is produced by means of plastic injection-molding.

The patent to Matthew et al. discloses wherein the plastic part is produced by means of plastic injection-molding.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the thermostat of the Elmer with wherein the plastic part is produced by means of plastic injection-molding in view of the teaching to Matthew et al., in order to have a thermostat and housing that is reliable and easy to manufacture (Col. 1, Lines 20-25)

### ***Response to Arguments***

Applicant's arguments filed 10/1/2008 have been fully considered but they are not persuasive.

### ***Applicant's Arguments***

Applicant has amended the claim language with further specificity by adding that the radiator is cooled by the coolant.



***Examiner Response to Arguments***

Applicant has amended the claims to include functional language (See MPEP 2114). It is clear from Elmer when the compressed air is heated to a pre-determined state and the cooling water temperature is low, the cooling water is capable of lowering the temperature of the cooler. Applicant has further overcome the 112 rejection.

As such, this action is made final.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEITH COLEMAN whose telephone number is (571)270-3516. The examiner can normally be reached on 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Cronin can be reached on (571)272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KAC  
/K. C./  
Examiner, Art Unit 3747

/Stephen K. Cronin/  
Supervisory Patent Examiner, Art Unit 3747